



A-688A.ST25
SEQUENCE LISTING

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<120> ADHESION ANTAGONISTS (as amended)

<130> A-688A

<140> US 09/840,277

<141> 2001-04-23

<150> US 60/198,919

<151> 2000-04-21

<150> US 60/201,394

<151> 2000-05-03

<160> 137

<170> PatentIn version 3.2

<210> 1

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<212> DNA

<213> Homo sapiens

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<222> (1)..(684)

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1				5					10					15		

ggg	gga	ccg	tca	gtc	ttc	ctc	ttc	ccc	cca	aaa	ccc	aag	gac	acc	ctc	96
Gly	Gly	Pro	Ser	Val	Phe	Leu	Phe	Pro	Pro	Lys	Pro	Lys	Asp	Thr	Leu	
			20					25					30			

atg	atc	tcc	cgg	acc	cct	gag	gtc	aca	tgc	gtg	gtg	gtg	gac	gtg	agc	144
Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	
		35					40					45				

cac	gaa	gac	cct	gag	gtc	aag	ttc	aac	tgg	tac	gtg	gac	ggc	gtg	gag	192
His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	
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gtg	cat	aat	gcc	aag	aca	aag	ccg	cgg	gag	gag	cag	tac	aac	agc	acg	240
Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	
65					70				75						80	

tac	cgt	gtg	gtc	agc	gtc	ctc	acc	gtc	ctg	cac	cag	gac	tgg	ctg	aat	288
Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	
				85					90					95		

ggc	aag	gag	tac	aag	tgc	aag	gtc	tcc	aac	aaa	gcc	ctc	cca	gcc	ccc	336
Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	
			100					105					110			

atc	gag	aaa	acc	atc	tcc	aaa	gcc	aaa	ggg	cag	ccc	cga	gaa	cca	cag	384
Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	
		115					120					125				

gtg	tac	acc	ctg	ccc	cca	tcc	cgg	gat	gag	ctg	acc	aag	aac	cag	gtc	432
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Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	
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agc	ctg	acc	tgc	ctg	gtc	aaa	ggc	ttc	tat	ccc	agc	gac	atc	gcc	gtg	480
Ser	Leu	Thr	Cys	Leu	Val	Lys	Gly	Phe	Tyr	Pro	Ser	Asp	Ile	Ala	Val	
145					150					155					160	
gag	tgg	gag	agc	aat	ggg	cag	ccg	gag	aac	aac	tac	aag	acc	acg	cct	528
Glu	Trp	Glu	Ser	Asn	Gly	Gln	Pro	Glu	Asn	Asn	Tyr	Lys	Thr	Thr	Pro	
				165					170					175		
ccc	gtg	ctg	gac	tcc	gac	ggc	tcc	ttc	ttc	ctc	tac	agc	aag	ctc	acc	576
Pro	Val	Leu	Asp	Ser	Asp	Gly	Ser	Phe	Phe	Leu	Tyr	Ser	Lys	Leu	Thr	
			180					185					190			
gtg	gac	aag	agc	agg	tgg	cag	cag	ggg	aac	gtc	ttc	tca	tgc	tcc	gtg	624
Val	Asp	Lys	Ser	Arg	Trp	Gln	Gln	Gly	Asn	Val	Phe	Ser	Cys	Ser	Val	
		195					200					205				
atg	cat	gag	gct	ctg	cac	aac	cac	tac	acg	cag	aag	agc	ctc	tcc	ctg	672
Met	His	Glu	Ala	Leu	His	Asn	His	Tyr	Thr	Gln	Lys	Ser	Leu	Ser	Leu	
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<210> 2
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Met	Ile	Ser	Arg	Thr	Pro	Glu	Val	Thr	Cys	Val	Val	Val	Asp	Val	Ser	
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His	Glu	Asp	Pro	Glu	Val	Lys	Phe	Asn	Trp	Tyr	Val	Asp	Gly	Val	Glu	
	50					55					60					
Val	His	Asn	Ala	Lys	Thr	Lys	Pro	Arg	Glu	Glu	Gln	Tyr	Asn	Ser	Thr	
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Tyr	Arg	Val	Val	Ser	Val	Leu	Thr	Val	Leu	His	Gln	Asp	Trp	Leu	Asn	
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Gly	Lys	Glu	Tyr	Lys	Cys	Lys	Val	Ser	Asn	Lys	Ala	Leu	Pro	Ala	Pro	
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Ile	Glu	Lys	Thr	Ile	Ser	Lys	Ala	Lys	Gly	Gln	Pro	Arg	Glu	Pro	Gln	
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Val	Tyr	Thr	Leu	Pro	Pro	Ser	Arg	Asp	Glu	Leu	Thr	Lys	Asn	Gln	Val	

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140

130

135

Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
145 150 155 160

Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
165 170 175

Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu Thr
180 185 190

Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser Val
195 200 205

Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser Leu
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Ser Pro Gly Lys
225

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Gly Gly Gly Lys Gly Gly Gly Gly
1 5

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Gly Gly Gly Asn Gly Ser Gly Gly
1 5

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Gly Gly Gly Cys Gly Gly Gly Gly
1 5

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Glu Cys Glu Ser Gly Pro Cys Cys Arg Asn Cys Lys Phe Leu Lys Glu
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Gly Thr Ile Cys Lys Arg Ala Arg Gly Asp Asp Met Asp Asp Tyr Cys
 20 25 30

Asn Gly Lys Thr Cys Asp Cys Pro Arg Asn Pro His Lys Gly Pro Ala
 35 40 45

Thr

<210> 9
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 <223> RGD, NGR derivative peptide

<220>
 <221> misc_feature
 <222> (2, 5 and)..(7)
 <223> Xaa is any amino acid

<400> 9

Arg Xaa Glu Thr Xaa Trp Xaa
 1 5

<210> 10

<400> 10
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<210> 11

<211> 9

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<223> RGD, NGR derivative peptide

<220>

<221> misc_feature

<222> (2, 3, 7 and)..(8)

<223> Xaa is any amino acid

<400> 11

Cys Xaa Xaa Arg Leu Asp Xaa Xaa Cys
 1 5

<210> 12

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<220>

<221> misc_feature

<222> (1, 2, 3, 7, 8 and)..(9)

<223> Xaa is any amino acid with Xaa at 1, 3, 7 and 9 capable of forming a bridge.

<400> 13

Xaa Xaa Xaa Arg Gly Asp Xaa Xaa Xaa
 1 5

<210> 14

<211> 17

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<223> RGD, NGR derivative peptide

<220>

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<221> misc_feature
 <222> (2, 3, 4, 5, 6, 12, 13, 14, 15 and)..(16)
 <223> At positions 2, 3, 4, 5, 6, 12, 13, 14, 15 and 16, Xaa is any amino acid or may be absent.

<400> 14

Cys Xaa Xaa Xaa Xaa Xaa Cys Arg Gly Asp Cys Xaa Xaa Xaa Xaa Xaa
 1 5 10 15

Cys

<210> 15
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<220>
 <223> RGD, NGR derivative peptide

<220>
 <221> misc_feature
 <222> (1 and)..(8)
 <223> Xaa is an independently selected amino acid.

<220>
 <221> misc_feature
 <222> (2 and)..(7)
 <223> Xaa equals 0 to 4 amino acids, each which is independently selected.

<220>
 <221> misc_feature
 <222> (4)..(4)
 <223> Xaa is selected from the group consisting of glycine and leucine.

<220>
 <221> misc_feature
 <222> (5)..(5)
 <223> Xaa is selected from the group consisting of tryptophan and leucine.

<400> 15

Xaa Xaa Asp Asp Xaa Xaa Xaa Xaa
 1 5

<210> 16
 <211> 10
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 <213> Artificial Sequence

<220>
 <223> RGD, NGR derivative peptide

<220>
 <221> misc_feature
 <222> (1 and)..(10)
 <223> Xaa is any amino acid.

<220>
 <221> misc_feature

<222> (2 and)..(9)
 <223> Xaa equals 0 to 3 amino acids.

<220>
 <221> misc_feature
 <222> (3)..(3)
 <223> Xaa is selected from the group consisting of tryptophan and proline.

<220>
 <221> misc_feature
 <222> (6)..(6)
 <223> Xaa is selected from the group consisting of glycine and leucine.

<220>
 <221> misc_feature
 <222> (7)..(7)
 <223> Xaa is selected from the group consisting of tryptophan and leucine.

<220>
 <221> misc_feature
 <222> (8)..(8)
 <223> Xaa is selected from the group consisting of leucine, tryptophan, and methionine.

<400> 16
 Xaa Xaa Xaa Asp Asp Xaa Xaa Xaa Xaa Xaa
 1 5 10

<210> 17
 <211> 19
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 <223> Vinculin binding/selectin antagonist peptide

<220>
 <221> misc_feature
 <222> (3, 5, 6, 13)..(15)
 <223> Xaa is any naturally occurring amino acid residue.

<400> 17
 Arg Lys Xaa Asn Xaa Xaa Trp Thr Trp Val Gly Thr Xaa Lys Xaa Leu
 1 5 10 15
 Thr Glu Glu

<210> 18
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<220>
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 <222> (2, 3, 4, 7)..(15)

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<223> Xaa is any naturally occurring amino acid residue

<400> 18

Cys Xaa Xaa Xaa Tyr Thr Xaa Leu Val Ala Ile Gln Asn Lys Xaa Glu
1 5 10 15

<210> 19

<211> 19

<212> PRT

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<223> vinculin binding/selectin antagonist peptide

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<221> misc_feature

<222> (3, 4, 5, 6, 8, 13, 15)..(18)

<223> Xaa is any naturally occurring amino acid residue.

<400> 19

Arg Lys Xaa Xaa Xaa Xaa Trp Xaa Trp Val Gly Thr Xaa Lys Xaa Leu
1 5 10 15

Thr Xaa Glu

<210> 20

<211> 16

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<223> vinculin binding/selectin antagonist peptide

<220>

<221> misc_feature

<222> (2, 5, 6, 7, 12, 13)..(14)

<223> Xaa is any naturally occurring amino acid residue.

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Ala Xaa Asn Trp Xaa Xaa Xaa Glu Pro Asn Asn Xaa Xaa Xaa Glu Asp
1 5 10 15

<210> 21

<211> 13

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<223> vinculin binding/selectin antagonist peptide

<220>

<221> misc_feature

<222> (1, 3, 6, 9, 12)..(13)

<223> Xaa is any naturally occurring amino acid residue.

<400> 21

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Xaa Lys Xaa Lys Thr Xaa Glu Ala Xaa Asn Trp Xaa Xaa
1 5 10

<210> 22
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<220>
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<400> 22

Cys Leu Cys Arg Gly Asp Cys Ile Cys
1 5

<210> 23
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<400> 23

Cys Trp Asp Asp Gly Trp Leu Cys
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Cys Trp Asp Asp Leu Trp Trp Leu Cys
1 5

<210> 25
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<400> 25

Cys Trp Asp Asp Gly Leu Met Cys
1 5

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Cys Trp Asp Asp Gly Trp Met Cys
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Cys Ser Trp Asp Asp Gly Trp Leu Cys
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<223> Integrin antagonist peptide

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Asn Gly Arg
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<223> Integrin antagonist peptide

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Gly Ser Leu
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<400> 31

Arg Gly Asp

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<210> 32

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<400> 33

Cys Asn Gly Arg Cys Val Ser Gly Cys Ala Gly Arg Cys
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Cys Leu Ser Gly Ser Leu Ser Cys
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Gly Ser Leu

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<400> 43

Arg Thr Asp Leu Asp Ser Leu Arg Thr
1 5

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<400> 44

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1 5

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Gly Asp Leu Asp Leu Leu Lys Leu Arg Leu Thr Leu
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<400> 46

Gly Asp Leu His Ser Leu Arg Gln Leu Leu Ser Arg
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Arg Asp Asp Leu His Met Leu Arg Leu Gln Leu Trp
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Ser Ser Asp Leu His Ala Leu Lys Lys Arg Tyr Gly
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Arg Gly Asp Leu Lys Gln Leu Ser Glu Leu Thr Trp
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<222> (2)..(3)

<223> Xaa is any amino acid residue

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Ser Thr Gly Gly Phe Asp Asp Val Tyr Asp Trp Ala Arg Gly Val Ser
1 5 10 15

Ser Ala Leu Thr Thr Thr Leu Val Ala Thr Arg
20 25

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Ser Thr Gly Gly Phe Asp Asp Val Tyr Asp Trp Ala Arg Arg Val Ser
1 5 10 15

Ser Ala Leu Thr Thr Thr Leu Val Ala Thr Arg
20 25

<210> 53

<211> 30

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<213> Artificial Sequence

<220>

<223> Integrin antagonist peptide

<400> 53

Ser Arg Gly Val Asn Phe Ser Glu Trp Leu Tyr Asp Met Ser Ala Ala
1 5 10 15

Met Lys Glu Ala Ser Asn Val Phe Pro Ser Arg Arg Ser Arg
20 25 30

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<220>
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<400> 54

Ser Ser Gln Asn Trp Asp Met Glu Ala Gly Val Glu Asp Leu Thr Ala
 1 5 10 15

Ala Met Leu Gly Leu Leu Ser Thr Ile His Ser Ser Ser Arg
 20 25 30

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<400> 55

Ser Ser Pro Ser Leu Tyr Thr Gln Phe Leu Val Asn Tyr Glu Ser Ala
 1 5 10 15

Ala Thr Arg Ile Gln Asp Leu Leu Ile Ala Ser Arg Pro Ser Arg
 20 25 30

<210> 56
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<400> 56

Ser Ser Thr Gly Trp Val Asp Leu Leu Gly Ala Leu Gln Arg Ala Ala
 1 5 10 15

Asp Ala Thr Arg Thr Ser Ile Pro Pro Ser Leu Gln Asn Ser Arg
 20 25 30

<210> 57
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<400> 57

Asp Val Tyr Thr Lys Lys Glu Leu Ile Glu Cys Ala Arg Arg Val Ser
 1 5 10 15

Glu Lys

<210> 58
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 <222> (5)..(5)
 <223> Xaa is any amino acid residue

<400> 58

Arg Gly Asp Gly Xaa
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<210> 59
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 <222> (6)..(6)
 <223> Xaa is any amino acid residue

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Cys Ala Arg Arg Leu Asp Ala Pro Cys
 1 5

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Cys Pro Ser Arg Leu Asp Ser Pro Cys
1 5

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Cys Asp Cys Arg Gly Asp Cys Phe Cys
1 5

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Cys Asp Cys Arg Gly Asp Cys Leu Cys
1 5

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Arg Gly Asp Leu Ala Ala Leu Ser Ala Pro Pro Val
1 5 10

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Asp Ile Thr Trp Asp Gln Leu Trp Asp Leu Met Lys
1 5 10

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<400> 66

Asp Ile Thr Trp Asp Glu Leu Trp Lys Ile Met Asn
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<223> selectin antagonist peptide

<400> 67

Asp Tyr Thr Trp Phe Glu Leu Trp Asp Met Met Gln
1 5 10

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<223> selectin antagonist peptide

<400> 68

Gln Ile Thr Trp Ala Gln Leu Trp Asn Met Met Lys
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<223> Selectin antagonist peptide

<400> 69

Asp Met Thr Trp His Asp Leu Trp Thr Leu Met Ser
1 5 10

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Ser Gln

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 20 25 30

ctc atg atc tcc cgg acc cct gag gtc aca tgc gtg gtg gtg gac gtg 144
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 35 40 45

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 Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
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 Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
 65 70 75

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 Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
 80 85 90 95

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 Asn Gly Lys Glu Tyr 100 Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
 105 110

ccc atc gag aaa acc atc tcc aaa gcc aaa ggg cag ccc cga gaa cca 384
 Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
 115 120 125

cag gtg tac acc ctg ccc cca tcc cgg gat gag ctg acc aag aac cag 432
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85 90
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Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala Val
145 150 155 160
Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr Pro
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195 200 205
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225 230 235 240
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<212> PRT

<213> Artificial Sequence

<220>

<223> Laminin related peptide

<400> 116

Met Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg
1 5 10 15

<210> 117

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Laminin related peptide

<400> 117

Met Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg
1 5 10 15

Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg
20 25

<210> 118

<211> 26

<212> PRT

<213> Artificial Sequence

<220>

<223> Laminin related peptide

<400> 118

Met Ile Pro Cys Asn Asn Lys Gly Ala His Ser Val Gly Leu Met Trp
1 5 10 15

Trp Met Leu Ala Arg Gly Gly Gly Gly Gly
20 25

<210> 119

<211> 25

<212> PRT

<213> Artificial Sequence

<220>

<223> Laminin related peptide

<400> 119

A-688A.ST25

Met Tyr Ile Gly Ser Arg Arg Glu Asp Val Glu Ile Leu Asp Val Pro
 1 5 10 15

Asp Ser Gly Arg Gly Gly Gly Gly Gly
 20 25

<210> 120
 <211> 20
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Laminin related peptide

<400> 120

Met Arg Gly Asp Arg Gly Asp Tyr Ile Gly Ser Arg Arg Gly Asp Gly
 1 5 10 15

Gly Gly Gly Gly
 20

<210> 121
 <211> 48
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Encoding Laminin related peptide, for PCR reaction to yield
 in-frame fusion to Fc

<400> 121
 gaataacata tgtacatcgg ttctcgtggt ggaggcggtg gggacaaa 48

<210> 122
 <211> 81
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Encoding Laminin related peptide, for PCR reaction to yield
 in-frame fusion to Fc

<400> 122
 gaataacata tgtacatcgg ttctcggttat attggctccc gctacattgg tagccgtgac 60
 aaaactcaca catgtccacc t 81

<210> 123
 <211> 111
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Encoding Laminin related peptide, for PCR reaction to yield
 in-frame fusion to Fc

<400> 123
 gaataacata tgtacatcgg ttctcggttat attggctccc gctacattgg tagccgttat 60
 atcggctctc gctatattgg tagccgcgac aaaactcaca catgtccacc t 111

<210> 124
 <211> 93
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Encoding Laminin related peptide, for PCR reaction to yield
 in-frame fusion to Fc

 <400> 124
 gaataacata tgatcccgtg caacaacaaa ggtgctcact ctgttggtct gatgtggtgg 60
 atgctggctc gtggtggagg cggtggggac aaa 93

 <210> 125
 <211> 90
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Encoding Laminin related peptide, for PCR reaction to yield
 in-frame fusion to Fc

 <400> 125
 gaataacata tgtacatcgg ttctcgtcgt gaagacgttg aaatcctgga cgttccggac 60
 tctggtcgtg gtggaggcgg tggggacaaa 90

 <210> 126
 <211> 75
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Encoding Laminin related peptide, for PCR reaction to yield
 in-frame fusion to Fc

 <400> 126
 gaataacata tgcgtggtga ccgtggtgac tacatcggtt ctcgtcgtgg tgacggtgga 60
 ggcggtgggg acaaa 75

 <210> 127
 <211> 20
 <212> DNA
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 <220>
 <223> Encoding Laminin related peptide, for PCR reaction to yield
 in-frame fusion to Fc

 <400> 127
 gttattgctc agcgggtggca 20

 <210> 128
 <211> 10
 <212> PRT
 <213> Artificial Sequence

 <220>
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 <400> 128

A-688A.ST25

Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg
1 5 10

<210> 129
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 129

Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg
1 5 10 15

<210> 130
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 130

Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr
1 5 10 15

Ile Gly Ser Arg
20

<210> 131
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 131

Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr
1 5 10 15

Ile Gly Ser Arg Tyr Ile Gly Ser Arg
20 25

<210> 132
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 132

Ile Pro Cys Asn Asn Lys Gly Ala His Ser Val Gly Leu Met Trp Trp
1 5 10 15

Met Leu Ala Arg
20

<210> 133
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 133

Tyr Ile Gly Ser Arg Arg Glu Asp Val Glu Ile Leu Asp Val Pro Asp
1 5 10 15

Ser Gly Arg

<210> 134
<211> 14
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 134

Arg Gly Asp Arg Gly Asp Tyr Ile Gly Ser Arg Arg Gly Asp
1 5 10

<210> 135
<211> 25
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 135

Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr Ile Gly Ser Arg Tyr
1 5 10 15

Ile Gly Ser Arg Tyr Ile Gly Ser Arg
20 25

<210> 136
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 136

Arg Glu Asp Val Glu Ile Leu Asp Val Tyr Ile Gly Ser Arg Pro Asp
1 5 10 15

Ser Gly Arg

<210> 137
<211> 19
<212> PRT
<213> Artificial Sequence

<220>
<223> Laminin related peptide

<400> 137

Tyr Ile Gly Ser Arg Arg Glu Asp Val Glu Ile Leu Asp Val Pro Asp
1 5 10 15

Ser Gly Arg